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Date /Time: 5/11/2004 # Pages: 12 (to follow)

TO : USPTO

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SUBJECT: Application Serial No. 09/759,781, filed 1/11/2001

Examiner Wayne A. Langel, Group Art Unit 1754

Comments: Supplemental Amendment in response to Examiner interview 5/10/2004

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MAY 11 2004  
OFFICIAL PATENT  
Docket S-96306

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : Rau et al  
SERIAL NO. : 09/759,781  
FILED : 1/11/2001  
TITLE : Method and Apparatus for Extracting and Sequestering Carbon  
Dioxide  
EXAMINER : Wayne A. Langel  
Group Art Unit: 1754  
DOE NO. : S-96306  
CUSTOMER NO: 31971



31971

PATENT TRADEMARK OFFICE

Supplemental Amendment

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the First Office Action dated 3/9/2004, having a response due by 6/9/2004, a response was submitted by fax on April 29, 2004. This is a supplemental amendment being submitted in response to a May 10, 2004 telephone interview between the Examiner and the Applicants' agent.

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INTRODUCTORY COMMENTS

On May 10, 2004, the Applicants' Agent (Chang) and USPTO Examiner Langel discussed by telephone, the Response to the First Office Action submitted by the Applicants' Agent on April 29, 2004. The Applicants hereby respectfully request reconsideration of the application in view of the resolution reached during the telephone interview, the subsequent amended claims, and the April 29, 2004 Amendment submitted as response to the First Office Action dated 3/9/2004.

Claims 1-35 are pending in the application. Claims 1-17 are withdrawn from consideration by this Amendment. A record of the telephone interview is attached herewith.

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TELEPHONE INTERVIEW SUMMARY RECORD

Summary record of a telephone interview conducted on May 10, 2004 with the Examiner for the subject Application. The interview was requested by Applicants' Patent Agent to facilitate Applicants' Response to First Office Action dated March 9, 2004. Applicants' Amendment submitted April 29, 2004 as Response to the First Office Action was discussed.

All Participants (applicant, applicant's representative, PTO personnel):

(1) (USPTO) Wayne A. Langel (2) R. Chang (Patent Agent for Applicants)

Date of Interview: May 10, 2004

Time of Interview: 2:00 p.m. (EST)

Type: X Telephone      Personal

Exhibit shown or demonstration conducted:      Yes X No

Agreement X was reached with respect to all of the objections/rejections in First Office Action dated March 9, 2004.

Claims discussed:

Claims 18-34 were discussed (as related to specific objections and rejections raised in the First Office Action dated March 9, 2004).

Identification of prior art discussed:

European patent 487102 ("Mori") and U.S. Patent 5,261,490 ("Ebinuma").

Summary of principal arguments, discussion, results and agreements reached:

- 1) Rejection under 35 U.S.C. 112, second paragraph
    - a) claims 20, 21, 24 and 25 were amended to replace the word "apparatus" with the word "method".
    - b) Claim 27 was amended to clarify that the bodies of water are "large".
- Examiner Langel said these changes were adequate.

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2) new claim 35 was added to claim subject matter of the invention disclosed in the Specification but not previously claimed.

3) Restriction under 35 U.S.C. 121

The Amendment submitted April 29, 2004 had elected claims 18-24. The text for withdrawn claims 1-17 had inadvertently been omitted in the Amendment submitted April 29, 2004. The text of these withdrawn claims is included herein in this Supplemental Amendment.

4) Restriction under 35 U.S.C. 103(a)

Applicants' Agent asserted that Mori discloses capturing CO<sub>2</sub> in the form of bicarbonate, for the purpose of reusing/recycling the CO<sub>2</sub>. Thus, bicarbonate is a form for temporarily capturing CO<sub>2</sub>, and not a form for permanent disposal. Applicants' Agent further asserted that Ebinuma teaches away from disposal of CO<sub>2</sub> in bodies of water. Ebinuma teaches disposal in the ground at high latitude (e.g. frozen tundra), or in the sea floor. Applicants' Agent asserted that Ebinuma is teaching a method to keep the CO<sub>2</sub> from coming in contact with the water. The Examiner asked if the claimed invention is limited to disposal in bodies of water, citing that the Specification refers to "preferred disposal site is a large body of water ...", as opposed to disposal in the ground. Applicants' Agent replied that the invention as disclosed in the Specification covers disposal in bodies of water. Applicants' Agent agreed to amend claim 18 to clarify the disposal site as a large body of water. The Examiner agreed that the submitted remarks and claims to be resubmitted would overcome the rejection based on Mori/Ebinuma.

5) Follow-up Actions: Applicants' Agent will submit a supplemental amendment with amended claims, and the text of the withdrawn claims. The Examiner will review the Amendment and Supplemental Amendment, and may review a few more prior art references.

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CONCLUSION

In view of the Amendment submitted April 29, 2004, and this Supplemental Amendment with amended claims, Applicant(s) respectfully request(s) that the Examiner allow Claims 18-35. If the Examiner in charge of this case feels that there are any remaining or unresolved issues, the Examiner is urged to contact the Patent Agent listed below (pacific time zone).

Respectfully submitted,

Date: May 11, 2004

Randall W. Chang

Randall W. Chang

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U.S. Department of Energy

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